Attorney Docket No. 027557-064

Serial No.: 09/684,985

2. (Original) A radio transceiver as claimed in claim 1, wherein the estimated first measure of quality is the signal-to-interference ratio.

3. (Original) A radio transceiver as claimed in claim 2, further comprising:

a comparison circuit, for comparing the estimated signal-to-interference ratio with a threshold value thereof; and

a control circuit, for transmitting a power control signal to a further transceiver, based on the result of said comparison.

4. (Original) A radio transceiver as claimed in claim 3, wherein the signal-to-interference ratio threshold value is set to achieve a target value of a second measure of quality.

5. (Original) A radio transceiver as claimed in claim 4, wherein the second measure of quality is a bit error rate.

6. (Original) A radio transceiver as claimed in claim 4, wherein the second measure of quality is a frame error rate.

## 7. (Canceled)

- 8. (Currently Amended) A radio transceiver as claimed in claim 7 1, wherein the response speed of the estimation algorithm is controlled such that a first higher response speed is used in the event of a low measure of velocity of the transceiver, and a second lower response speed is used in the event of a high measure of velocity of the transceiver.
- 9. (Previously Amended) A mobile station, including a radio transceiver as claimed in claim 1.

Attorney Docket No. 027557-064

Serial No.: 09/684,985

10. (Previously Amended) A base station, including a radio transceiver as claimed in claim 1.

11. (Currently Amended) A method of estimating quality of received radio signals in a transceiver, comprising:

obtaining a measure of relative velocity of the transceiver; and estimating the quality using an estimation algorithm, including using the measure of relative velocity as an input to the estimation algorithm, wherein the quality estimation algorithm has a response speed, and the response speed of the estimation algorithm is controlled in response to the measure of relative velocity of the transceiver.

12. (Original) A method as claimed in claim 11, wherein the estimated measure of quality is the signal-to-interference ratio.

## 13. (Canceled)

- 14. (Currently Amended) A method as claimed in claim 13 11, wherein the response speed of the estimation algorithm is controlled such that a first higher response speed is used in the event of a low measure of velocity of the transceiver, and a second lower response speed is used in the event of a high measure of velocity of the transceiver.
  - 15. (Canceled)
  - 16. (Canceled)
  - 17. (Canceled)
  - 18. (Canceled)